

# **Exhibit A**

## CURRICULUM VITAE

November 2007

**James Christopher McInnes, Ph.D.**

### PERSONAL HISTORY

**Date of Birth** September 28, 1963

**Place of Birth** Port Angeles, Washington

**Citizenship** United States of America

**Office Address** Ultreo, Inc.  
9461 Willows Road NE, Suite 101  
Redmond WA 98052  
Phone: 425-250-1705  
Fax: 425-250-1799  
E-mail: chris@ultreo.com

**Home Address** 9732 2<sup>nd</sup> Ave NW  
Seattle WA 98117  
Phone: 206-706-9005  
E-mail: jcmsew@hotmail.com

### EDUCATION

<u>Institution / Location</u>	<u>Degree</u>	<u>Date</u>	<u>Degree Major</u>
University of Washington Seattle WA	Ph.D.	1992	Bioengineering
University of Washington Seattle WA	BSME	1986	Mechanical Engineering

### SERVICE, HONORS, & MEMBERSHIPS

- ANSI ISO TC106/SC7/WG1-4 Dentistry, Normative Standard Development Member (1998-2004), United States expert for powered toothbrushes (2004)
- Member International Association of Dental Research; Oral Health Research Group
- Member Ultrasonic Industry Association
- Tau Beta Pi (Engineering 1984), Pi Tau Sigma (Mechanical Engineering 1985)
- Graduated Cum Laude from University of Washington;



## PROFESSIONAL EXPERIENCE

### **Ultreo, Inc., Redmond, WA (2004 - Present)**

*Principal Scientist.* Oversight and execution of core oral biology research to support concept refinement leading to product development and introduction. Providing bioengineering expertise with respect to efficacy and safety of an oral consumer healthcare device.

### **Philips Oral Healthcare Inc., Snoqualmie, WA (2000-2004)**

*Principal Scientist.* Coordination of internal and external research. Working with multidisciplinary teams to meet the clinical testing needs of product innovation, development and marketing. Analysis of new techniques and methods to quantitate efficacy and safety of oral hygiene products.

### **Shanghai Jiao Tong University, Shanghai, China (1997-1998)**

*Instructor.* Taught English language skills to doctorate, Master of Business Administration and English major students. Focus of work was on technical writing and oral communication for engineering, scientific and business pursuits. Developed own curriculum in a diverse skills environment.

### **Optiva Corporation, Bellevue, WA (1992-1997, 1998-2000)**

*Sr. Research Scientist.* Work included studying scientific and clinical efficacy of a sonic toothbrush that utilizes sonic vibrations to aid in the removal of oral bacteria associated with plaque. Position included research and development on product improvements and new dental devices.

### **Research Center in Oral Biology, University of Washington (1987-1992)**

*NIDR Pre-Doctoral Fellowship.* Investigated sonic vibrations as a means to disperse and/or damage oral bacteria in the oral cavity. This research project included constructing an apparatus for the generation of sonic vibrations, investigating methods of quantifying low-frequency sonic energy, developing assays for the detection of bacteria adherent to a model tooth surface, and analyzing exposed bacteria for damage via electron microscopy.

## PATENTS

**US 7,269,873 B2** Ultrasonic toothbrushes employing an acoustic waveguide. Gerald K. Brewer, James Christopher McInnes, Daniel Bayeh, Fredrick Jay Bennett, Richard K. Taylor, David A. Ballard, George A. Barrett, September 18, 2007

**US 6,309,835** Methods for quantitating the efficacy of oral care products. Lokanathan M. Iyer, Robert E. Akridge, James C. McInnes, October 30, 2001

**US 6,202,241** Brushhead for use in an acoustic toothbrush. Thomas Hassell, Stephen M. Meginness, III; James C. McInnes; March 20, 2001

**US 5,784,742** Toothbrush with adaptive load sensor. David Giuliani, Ryan W. McMahon; James Christopher McInnes, July 28, 1998

## PRESENTATIONS / LECTURES

- "From Concept to Commercialization: Taking a product from academia to production". 2007 EPI Forum, 2007
- "Incorporating ultrasonics into the electronic toothbrush" Improving Great Products 2 - The SBIR and STTR Programs: A Pathway to Translational Research, International Association for Dental Research, 2007.
- "Sonic Technology & Research" Emerging Trends in Oral Care, Symposium sponsored by Philips Oral Healthcare. 2002, 2003, 2004.
- "Disruption of Dental Plaque Biofilm via Fluid Forces" Montana State University, Center for Biofilm Engineering, TAC Meeting 2003
- "Oral Cavity Hydrodynamics – Dental plaque growth, removal, and the effects of powered brushing." A Cytergy short course. 2003

## PUBLICATIONS:

### Journals

Mourad PD, Roberts FA, McInnes C. Synergistic use of ultrasound and sonic motion for removal of dental plaque bacteria. *Compend Cont Educ Dent* 2007, 28(7): 354-358.

Yuen A, Nelson R, Johnson MR, McInnes C, Nguyen HK, Sorensen JA,. *In vitro* evaluation of the efficacy and safety of the IntelliClean System: Interproximal biofilm removal and dentin substrate wear. *Compend Cont Educ Dent* 2004, 25 (Suppl 1) 44-50.

McInnes C, Pace J. Designing the next generation of a sonic toothbrush. *Am J Dent* 2002; 15: 4B-6B.

Wu-Yuan CD, Anderson RD, McInnes C. Ability of the Sonicare electronic toothbrush to generate dynamic fluid activity that removes bacteria. *J Clin Dent* 1994; 5: 89-93.

Johnson B, McInnes C. Clinical evaluation of the efficacy and safety of a new sonic toothbrush. *J Periodontol* 1994; 65: 692-697.

McInnes C, Johnson B, Emling RC, Yankell SL. Clinical and computer assisted evaluations of the Sonicare electronic toothbrush. *J Clin Dent* 1994; 5: 13-18.

McInnes C, Engel D, Martin RW. Fimbria damage and removal of adherent bacteria after exposure to acoustic energy. *Oral Microbiol Immunol* 1993; 8: 277-282.

McInnes C, Engel D, Moncla BJ, Martin RW. Reduction in adherence of *Actinomyces viscosus* after exposure to low-frequency acoustic energy. *Oral Microbiol Immunol* 1992; 7: 171-176.

McInnes C, Engel D, Martin RW. Bacterial luminescence: A new tool for investigating the effects of acoustic energy and cavitation. *J Acoust Soc Am* 1990; 88: 2527-2532.

## **Abstracts & Invited Articles**

McInnes C, Yuen A, Johnson MJ. In vitro methods to evaluate plaque biofilm removal from interproximal locations. *J Dent Res* 2004; **83** (IADR Abstract #165)

Moritis K, Johnson MR, McInnes C. Investigation of the influence of a powered toothbrush's bristle motion on plaque reduction and safety. *J Dent Res* 2003; **82** (AADR Abstract#1757)

Delaurenti M, Platt K, Johnson MR, McInnes C. Development of a powered toothbrush head for improved efficacy. *J Dent Res* 2003; **82** (AADR Abstract#1758)

McInnes C. Fluid Dynamics. *Prac Rev Ped Dent* 2002; **13**: 5.

McInnes C. Water World – Fluid dynamics in the mouth shape how biofilms grow and survive. Scientific American custom publication: "Emerging Trends in Oral Care – The Biofilm Revolution". 2002

McInnes C, Hill JS, Johnson MR. Effect of toothbrushes on fluid deposition into a model periodontal pocket. *J Dent Res* 2001; **80** (AADR Abstract #668): 119

Hill JS, McInnes C, Johnson MR, Ballard DA. In vitro assay of tooth contact by toothbrushes. *J Dent Res* 2001; **80** (AADR Abstract #669): 119

McInnes C, Moncla B, Engel D, Martin RW. Biological effects of acoustic energy on the oral bacteria *Wolinella recta*. *Proc of the Annu Int Conf IEEE Eng Med Biol Soc* 1989; **11**: 1644-1645.

## **Dissertation**

McInnes JC. Low-frequency acoustic energy, cavitation, and their effects on bacteria. Doctoral Dissertation, University of Washington, 1992.

## **GRANTS**

SBIR Grant #2R44 DE016761-02 "Rapid Plaque Removal by a Sonic and Ultrasonic Toothbrush" Key Personnel (2006)

SBIR Grant #1 R43 DE11639-01 "Pressure Sensing Sonic Toothbrush", Principal Investigator (1996)